

# ORIENTATION TO GASTROENTEROLOGY

## A Toolbook Program for the Gastroenterology Subspecialty Elective

### POSTER PRESENTATION

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#### ABSTRACT

*We have found that the "hypertext" properties of the ToolBook authoring system are quite versatile. We devised an application to introduce fellows, residents and medical students to the activities of the gastroenterology subspecialty elective at the George Washington University Medical Center. The program was available for use on the network workstations in the Himmelfarb Medical Library. A ToolBook "page" containing the master schedule was linked to pages describing each individual activity in detail. A questionnaire was completed by all 26 users of the program in order to evaluate its utility. The users found the application to be a useful adjunct to their GI rotation*

#### BACKGROUND INFORMATION

We developed this application for medical students and internal medicine residents who were rotating through the GI subspecialty elective at George Washington University Hospital. In order to provide a complementary orientation aid for this elective, we developed a collection of images and text to help outline the daily and weekly activities of the GI elective. The prototype program was tested on members of the senior class (Class of 1993) at the George Washington University School of Medicine and residents in Internal Medicine both rotating through our GI consultation elective. GI fellows also completed an evaluation of the software.

#### METHODS

Xrays were first backlit and photographed to provide high contrast Black and White 35 mm slides. Endoscopy images obtained via Mavigraph (Olympus Corporation) were scanned directly with a desktop Howtek Scanmaster (Howtek, Hudson, NH). Other endoscopic images were exported to floppy disk directly via SlideMaker software (Olympus Corp.) in \*.TGA format. The TGA files were converted to \*.BMP and imported into ToolBook.

#### AUTHORING TOOLS

The authoring system for this application was ToolBook v. 1.5 running under Microsoft WINDOWS 3.0. ToolBook uses the flexible Open Script programming language. Pages were linked via "mouseable" buttons and "hotwords".

#### HARDWARE REQUIREMENTS

The application was delivered over a Novell network running in the Himmelfarb Library AV Center. 12 workstations (Zenith 386SX machines) were utilized from a VAX file server using WINDOWS 3.0 and run-time ToolBook 1.5.

#### RESULTS

Questionnaires were administered to determine user acceptance of the software and to help in obtaining advice for future development and improvement. Ease of use was  $4.84 \pm 1$  (mean  $\pm$ SE), learning effectiveness  $4.42 \pm 1$  and efficiency  $4.03 \pm 1.3$  on a scale of 1-5.